IN THE CLAIMS:

Please substitute the following amended claims:

1. (original) An apparatus for filtration of water from hydrocarbons comprised of

a) a fresh-feed inlet,

b) a first dead end filter, having a filter medium that is hydrophobic,

c) a second cross-flow filter, having a membrane that is hydrophobic,

d) a common housing to contain both the first and second filters,

e) a system for the recirculation of the retentate,

f) a chamber for water settling, and

g) an outlet for clean fuel permeate.

2. (original) The filtration apparatus as set forth in claim 1, further characterized by a ratio of cross-flow to fresh-feed in the range of 1:1 to 1:30.

3. (original) The filtration apparatus as set forth in claim 1, wherein the pressure differential between the feed pressure and the permeate pressure is less than or equal to 50psi.

4. (original) The filtration apparatus as set forth in claim 1, wherein the operating temperature is maintained below or equal to 130 degrees Fahrenheit.

5. (original) The filtration apparatus as set forth in claim 1, wherein said first dead end filter is made from a material selected from the group consisting of nylon, polyester, polyvinylidene difluoride and polypropylene.

6. (original) The filtration apparatus as set forth in claim 1, wherein said first dead end filter has a pore size in the range of 0.5 μm to 100 μm.

7. (original) The filtration apparatus as set forth in claim 1, in which said second cross-flow filter is of a type selected from the group consisting of spiral wound module cartridges, tubular cartridges and hollow fiber cartridges.

8. (original) The filtration apparatus as set forth in claim 1, in which said second hydrophobic cross-flow filter is made from polytetrafluoroethylene membrane.

9. (original) The filtration apparatus as set forth in claim 8, further characterized by the polytetrafluoroethylene membrane having a sub micron pore size.

10. (original) The filtration apparatus as set forth in claim 8, wherein the polytetrafluoroethylene membrane is of 0.1 μm pore size.

11. (original) An apparatus for filtration of water from hydrocarbons comprised of

a) a top chamber;

b) a feed chamber;

c) a chamber for water settling;

d) a permeate chamber;

e) a fresh-feed inlet, communicating with said feed chamber;

f) a first dead end filter, having a filter medium that is hydrophobic, communicating on its inlet side with said feed chamber and on its outlet side with said top chamber;

g) a perforated tube sleeve guide containing said first dead end filter;

h) a second cross-flow filter, having a membrane that is hydrophobic, communicating on its inlet end with said top chamber and on its outlet end with a said chamber for water settling, which filter is further characterized by having a center tube for collection of permeate, communicating with said permeate chamber;

i) a non-perforated tube sleeve guide, containing said second cross-flow filter;

j) a common housing to contain both said first and second filters, including an elongate housing wall having opposed first and second open ends, an elongate cylindrical interior surface defining a housing cavity, and a series of plates extending across said open ends of said housing wall, defining said chambers;

k) a system for the recirculation of the retentate, including a port for outlet of the concentrate in fluid communication with said chamber for water settling, a circulation pump and a feed inlet having

fluid communication with the feed chamber in the housing; and

l) an outlet for clean fuel permeate in fluid communication with said permeate chamber.

12. (original) The apparatus for filtration of claim 11, further characterized by a ratio of cross-flow to fresh-feed in the range of 1:1 to 1:30.

13. (original) The apparatus for filtration of claim 11, wherein the pressure differential between the feed pressure and the permeate pressure is less than or equal to 50psi.

14. (original) The apparatus for filtration of claim 11, wherein the operating temperature is maintained below or equal to 130 degrees Fahrenheit.

15. (original) The apparatus for filtration of claim 11, wherein said first dead end filter has a pore size in the range of 0.5 μm to 100 μm.

16. (original) The apparatus for filtration of claim 11, in which said second hydrophobic cross-flow filter is made from polytetrafluoroethylene membrane.

17. (original) The apparatus for filtration of claim 16, wherein the polytetrafluoroethylene membrane is of 0.1 μm pore size.

18. (original) An apparatus for filtration of water from hydrocarbons comprised of

a) a fresh-feed inlet,

b) a plurality of first dead end filters, having filter media that are hydrophobic,

c) a plurality of second cross-flow filters, having membranes that are hydrophobic,

d) a common housing to contain said first and second filters,

e) a system for the recirculation of the retentate,

f) a chamber for water settling, and

g) an outlet for clean fuel permeate.

19. (original) An apparatus for filtration of water from hydrocarbons comprised of

a) a fresh feed inlet,

b) a first dead end filter, having a filter medium that is hydrophobic, in series with a second cross-flow filter, having a membrane that is hydrophobic, each filter being disposed within a separate housing,

c) a system for the recirculation of the retentate,

d) a chamber for water settling, and

e) an outlet for clean fuel permeate.

20. (withdrawn by Examiner) A method for removal of water from hydrocarbon liquid fuels containing surfactants, comprising the steps of

a) passing a water emulsion-containing fuel through a first hydrophobic filter,

b) coalescing water in said first hydrophobic filter to form large globules,

c) carrying away agglomerated water globules in the flow stream between the first and second filter,

d) excluding water globules at the surface of a cross-flow hydrophobic filter, and

e) passing water-free hydrocarbon liquid through said cross-flow hydrophobic filter.

21. (withdrawn by Examiner) The method of filtration as set forth in claim 20, wherein the hydrocarbon is selected from the group consisting of jet fuel, diesel fuel, and gasoline.

22. (withdrawn by Examiner) The method of filtration as set forth in claim 20, wherein the pressure differential between the feed pressure and the permeate pressure is less than or equal to 50psi.

23. (withdrawn by Examiner) The method of filtration as set forth in claim 20, wherein the operating temperature is maintained below or equal to 130 degrees Fahrenheit.

24. (original) A filter apparatus for the coalescing of water emulsified by a surfactant, comprised of a filter with a hydrophobic filter medium having a surface energy near to or less than that of the hydrophobic functional group of said surfactant.